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1 country table so that selection of a country in the country table references an
2 associated channel-to-frequency mapping table for the selected country” as
3 required by claims 1 and 5.

4 The Office argues that Fig. 11c in Kohashi shows the channel-to-frequency
5 tables. Applicant disagrees. Notice that Fig. 11c contains no reference to
6 “frequency” or “frequencies,” but instead shows a table correlating order,
7 broadcasting station codes, and guide channels. There is no correlation of
8 channels and frequency in Fig. 11c.

9 The Office further cites Fig. 2c of Kohashi as showing the claimed
10 indexing relationship between the country table and the channel-to-frequency
11 tables. Applicant disagrees. First, it is respectfully noted that neither Fig. 2c nor
12 its description, contains any reference to “frequency”. The description of Fig. 2c
13 (Col. 8 lines 40-43) states that the table of Fig. 2c provides “a relationship between
14 countries or languages and preferential orders of formats to be searched is stored
15 in advance.” Nowhere in Fig. 2c or the accompanying text is there any discussion
16 of how a country table is used to index into a channel-to-frequency mapping table
17 as Applicant claims.

18 The Office further cites Fig. 12 and Col. 8 lines 20-55+ as disclosing this
19 indexing relationship. Once again, Applicant respectfully disagrees. First, column
20 8 contains the text describing the various tables shown in Figs. 2a-2e, which are
21 discussed above. As already noted, none of the tables in Figs. 2a-2e shows a
22 “channel-to-frequency mapping tables being indexed by the country table so that
23 selection of a country in the country table references an associated channel-to-
24 frequency mapping table for the selected country” as required by claims 1 and 5.
25

1 Secondly, Fig. 12 shows part of a flow chart illustrating automatic channel
2 presetting and guide channel setting operation of the video cassette recorder of
3 Fig. 10. Following the flow chart in Fig. 12, after selection of a country at step
4 S44, there is a decision as to whether the channels are to be automatically or
5 manually at step S45. If automatically is chosen, the process runs through a series
6 of steps in Figs. 12, 4, and 5, including setting a minimum channel (S46 of Fig.
7 12), checking for a maximum channel and current position (S47-S48 of Fig. 12),
8 selecting a designated channel (S10 of Fig. 4), storing selected channel data (S13
9 of Fig. 4), searching for preferential order format (S15 of Fig. 4), evaluating for
10 broadcasting code (Fig. 5), and so on. Nowhere in the discussion of the flow
11 charts spanning several figures does Kohashi describe simply, "the channel-to-
12 frequency mapping tables being indexed by the country table so that selection of a
13 country in the country table references an associated channel-to-frequency
14 mapping table for the selected country."

15 For these reasons, Kohashi does not disclose the invention of claims 1 and
16 5. Applicant respectfully requests that the §102 rejection of claims 1 and 5 be
17 withdrawn.

18
19 **Claims 2 and 6** depend from claim 1 and 5 respectively, and are allowable
20 by virtue of this dependency. Moreover, these claims recite features that, taken
21 together with those of claim 1 and 5, define a country organization code system,
22 which is not shown by Kohashi.

23 Claims 2 and 6 include all of the elements of claims 1 and 5 and require
24 "wherein the country table lists the countries according to a uniquely assigned
25 country code." Kohashi does not disclose this feature. The Office cites Kohashi,

1 Fig. 2c as disclosing this feature.. Applicant respectfully points out that Kohashi
2 Fig. 2c discloses a “COUNTRY (LANGUAGE) / PREFERENTIAL [FORMAT]
3 ORDER.” Fig 2c is silent as to a “uniquely assigned country code”. Furthermore,
4 it could not even be improvised to work as the Office suggests since Fig. 2c shows
5 the first three countries listed (Germany, Switzerland, and Austria) as having
6 identical preferential orders (VPS→8/30/F1→PDC). With different countries
7 sharing identical preferential format orders, these orders cannot qualify as being
8 codes that are “uniquely assigned” to each country.

9 For these reasons, Kohashi does not disclose the invention of claims 2 and
10 6. Applicant respectfully requests that the §102 rejection of claims 2 and 6 be
11 withdrawn.

12
13 **Claims 4 and 8** depend from claim 1 and 5 respectively, and are allowable
14 by virtue of this dependency. Moreover, these claims recite features that, taken
15 together with those of claim 1 and 5, define features not disclosed in Kohashi.

16
17 **Claim 10** depends from claim 5 and is allowable by virtue of this
18 dependency. Moreover, this claim recites features that, taken together with those
19 of claim 5, define features not disclosed in Kohashi.

20
21 **Claim 11** has been cancelled without prejudice.

22
23 **Claim 12** has been amended to incorporate all of the elements of
24 independent claim 11 from which it depended. Claim 12 includes “a tuner module
25 coupled to adjust the tuner circuitry to scan multiple channels within a particular

1 locale for corresponding tuning frequencies, the tuner module storing the tuning
2 frequencies for the particular locale” so that “upon transporting the tuner to a new
3 locale, the tuner module scans multiple channels within the new locale for
4 corresponding tuning frequencies” and “upon transporting the tuner back to the
5 particular locale, the tuner module retrieves the stored tuning frequencies to
6 restore operation in the particular locale.” Kohashi is silent as to a tuner module
7 that “retrieves the stored tuning frequencies to restore operation in the particular
8 locale” upon “transporting the tuner back to the particular local.” Therefore,
9 Kohashi does not disclose the invention of claim 12. Applicant respectfully
10 requests that the §102 rejection of claim 12 be withdrawn.
11

12 **Claim 32** stands rejected based on the reasoning applied to claims 1 and 5.
13 Please reference the discussion of claims 1 and 5 above. With respect to claim 32,
14 Kohashi does not disclose “selecting, based on the country reference, a set of
15 channel-to-frequency mappings correlating channels to corresponding TV
16 frequencies in the country.” Therefore, Applicant respectfully requests the
17 rejection be withdrawn.
18

19 **Claim 33** is referenced to the rejection of claim 2 in the office action. It is
20 respectfully noted that claim 2 involves a limitation regarding “a uniquely
21 assigned country code,” and is not analogous to claim 33, which contains no such
22 limitation. Claim 33 depends from claim 32 and is allowable as a result of this
23 dependency. Accordingly, it is respectfully requested that the §102 rejection of
24 claim 33 be withdrawn.
25

1 **Claim 35** depends from claim 32 and is allowable by virtue of its
2 dependency on allowable claim 32. Applicant respectfully requests the §102
3 rejection of claim 35 be withdrawn.

4
5 **Claim 36** depends from allowable claim 32 and is allowable as a result of
6 this dependency. Moreover, this claim recites features that, taken together with
7 those of claim 32, define features not disclosed in Kohashi. Specifically Kohashi
8 does not disclose, “scanning for a better quality frequency within the channel.”
9 The Office cites Col.15, line 53- Col. 16 line 36 for support of this feature.
10 However, it is respectfully noted that the cited excerpt discloses choosing the most
11 preferred broadcasting station code format for a given guide channel, not scanning
12 for a “better quality frequency within the channel” as Applicant claims.
13 Therefore, Kohashi does not disclose the invention of claim 36 and the §102
14 rejection of claim 36 should be withdrawn.

15
16 **Claim 37** depends from claim 32 and is allowable as a result of this
17 dependency. Claim 37 further requires “looking up the country in a country table
18 that lists multiple countries” and “indexing from an entry for the country in the
19 country table to a particular channel-to-frequency table, the particular channel-to-
20 frequency table containing mappings of channel numbers to TV frequencies for
21 the country.” For the reasons argued above with respect to claims 1 and 5,
22 Kohashi does not disclose indexing from an entry for the country in the country
23 table to a particular channel-to-frequency table, as Applicant claims. Accordingly,
24 the §102 rejection of claim 37 should be withdrawn.

1 **Claim 38** depends from claim 37 and is allowable by virtue of this
2 dependency. Claim 38 further recites “looking up in the particular channel-to-
3 frequency table a TV frequency that corresponds to the channel.” Kohashi does
4 not disclose this element in combination with the elements incorporated in the
5 base claims 32 and 37. For these reasons, applicant respectfully requests that the
6 §102 rejection of claim 38 be withdrawn.

7
8 **Claim 40** requires “configuring a tuning system for operation in a first
9 locale by determining tuning frequencies for an associated set of channels”,
10 “storing the tuning frequencies for the first locale”, “upon transporting the tuning
11 system to a second locale, reconfiguring the tuning system for operation in the
12 second locale” and “upon transporting the tuning system back to the first locale,
13 retrieving the stored tuning frequencies to restore operation in the first locale.”
14 For the reasons given above with respect to claim 12, Kohashi does not disclose
15 storing the tuning frequencies for the first locale so that upon transporting the
16 tuning system back to the first locale these stored tuning frequencies can be
17 retrieved to restore operation in the first locale. The §102 rejection of claim 40
18 should be withdrawn.

19
20 **Claim 41** depends from claim 40 and further requires “scanning for optimal
21 tuning frequencies for the associated set of channels.” As noted above with
22 respect to claim 36, Kohashi does not disclose scanning for “optimal tuning
23 frequencies for the associated set of channels.” Thus, claim 41 should be in
24 condition for allowance.
25

1 **35 U.S.C. § 103**

2
3 **Claims 3, 7, 27-30, and 34**

4 **Claims 3, 7, 27-30, and 34** are rejected under 35 U.S.C. § 103(a) as being
5 unpatentable over Kohashi. Applicant respectfully traverses the rejection.

6
7 **Claim 3** depends from claim 1 and hence incorporates the features of
8 claim 1. As such, claim 3 requires “multiple channel-to-frequency mapping tables
9 correlating channel numbers to corresponding frequencies for associated countries
10 in the country table, the channel-to-frequency mapping tables being indexed by the
11 country table so that selection of a country in the country table references an
12 associated channel-to-frequency mapping table for the selected country.” Claim 3
13 further specifies, “the country table lists the countries according to an ITU.”

14 Kohashi provides no disclosure, teaching or suggestion of multiple channel-
15 to-frequency mapping tables being indexed by a country table so that selection of
16 a country in the country table references an associated channel-to-frequency
17 mapping table for the selected country.

18 The Office takes Official Notice of the ITU standard as providing a table to
19 identify each country. However, the ITU standard provides no teaching or
20 suggestion of the “channel-to-frequency mapping tables being indexed by the
21 country table so that selection of a country in the country table references an
22 associated channel-to-frequency mapping table for the selected country” as
23 required by claims 1 and 3. Hence, the Official Notice provides no teaching of the
24 missing element in Kohashi.
25

1 Accordingly, combining the references provides no suggestion of the
2 claimed invention. Therefore, it is respectfully requested that the §103 rejection of
3 claim 3 be withdrawn.
4

5 **Claim 7** depends from claim 5 and hence incorporates the features of
6 claim 5. As such, claim 7 requires “multiple channel-to-frequency mapping tables
7 correlating channel numbers to corresponding frequencies for associated countries
8 in the country table, the channel-to-frequency mapping tables being indexed by the
9 country table so that selection of a country in the country table references an
10 associated channel-to-frequency mapping table for the selected country.” Claim 7
11 further specifies, “the country table lists the countries according to an ITU.” For
12 the reasons argued above with respect to claim 3, Kohashi combined with Official
13 Notice of the ITU does not teach or suggest the features of claim 7. Therefore, it is
14 respectfully requested that the §103 rejection of claim 7 be withdrawn.
15
16

17 **Claim 27** defines an application program interface for a television tuning
18 system. The API has methods for performing a number of specific functions.

19 Claim 27 then lists the functions:

- 20 retrieving all analog video TV standards supported by the tuning system;
- 21 retrieving a current analog video TV standard in use;
- 22 setting a current TV channel;
- 23 retrieving the current TV channel;
- 24 retrieving highest and lowest channels available;
- 25 scanning for a precise signal on the current TV channel's frequency;

1 setting a country code;
2 retrieving the country code;
3 setting a storage index for regional channel to frequency mappings;
4 retrieving the storage index;
5 retrieving a number of TV sources plugged into the tuning system;
6 setting a type of tuning system;
7 retrieving the type of tuning system;
8 retrieving a current video frequency; and
9 retrieving a current audio frequency.

10 Kohashi is a hardware based solution to a television tuning system. This is
11 illustrated by Kohashi Fig. 1 which describes hardware components and memory.
12 As such, Kohashi would not have contemplated a software tuning solution. Since
13 the inherent purpose of an API is to interface between software and other
14 components or programs, Kohashi, lacking software, wouldn't have contemplated
15 an API. Thus, Kohashi could not even begin to teach a specific API for the
16 television tuning system as claimed in claim 27.

17 The Office generally argues that Kohashi discloses methods for performing
18 the functions recited in claim 27. Applicant disagrees. While the cited reference
19 cumulatively discloses a hardware circuit that may set a TV channel, it does not
20 disclose an API with various methods that may be called by a software application
21 to perform the various functions.

22 For these reasons, claim 27 is allowable over the cited prior art
23 combination, and it is respectfully requested that the §103 rejection be withdrawn.
24
25

1 **Claim 28** defines a method that includes “receiving an ITU code for a
2 particular country; and selecting, based on the ITU code, a set of TV channel-to-
3 TV frequency mappings for use in the particular country.” Kohashi describes a
4 system of choosing preferential broadcasting station codes by prioritizing different
5 formats, and then finding stations based on that preference. Kohashi does not
6 describe, teach, or suggest “selecting, based on the ITU code, a set of TV channel-
7 to-TV frequency mappings for use in the particular country.” As described above,
8 though Official Notice was taken of the existence of the ITU, no art teaching or
9 suggesting the claimed features has been cited regarding selecting a set of TV
10 channel-to-TV frequency mappings using an ITU. Therefore, taking Official
11 Notice along with the Kohashi reference still falls short of the elements of claim
12 28. For these reasons, claim 28 is allowable, and it is respectfully requested that
13 the §103 rejection of claim 28 be withdrawn.

14
15 **Claims 29 and 30** depend from claim 28 and hence incorporate the features
16 of claim 28, as well as additional limitations. For these reasons, claims 29 and 30
17 are allowable over the cited prior art combination, and it is respectfully requested
18 that the §103 rejection of claims 29 and 30 be withdrawn.

19
20 **Claim 34** depends from claim 32. As such, claim 34 contains all of the
21 features therein. Additionally, claim 34 recites additional features, which taken
22 together with those of claim 32, define a method of carrying out the steps of claim
23 32, wherein the country reference is an ITU. For the reasons given above with
24 respect to claim 28, claim 34 is allowable over Kohashi.

1 Claims 9, 13, 15, 16, 18 – 20, 22-24, 39 and 42

2 **Claims 9, 13, 15-16, 18-20, 22-24, 39, and 42** are rejected under 35 U.S.C.
3 § 103(a) as being unpatentable over Kohashi in view of U.S. Patent No. 5,355,162
4 to Yazolino et al. (hereinafter, “Yazolino”). Applicant respectfully traverses the
5 rejection.

6 **Claim 9** depends from claim 5 and hence incorporates the features of claim
7 5. As such, claim 9 requires “multiple channel-to-frequency mapping tables
8 correlating channel numbers to corresponding frequencies for associated countries
9 in the country table, the channel-to-frequency mapping tables being indexed by the
10 country table so that selection of a country in the country table references an
11 associated channel-to-frequency mapping table for the selected country.” Claim 9
12 further specifies that the elements of claim 5 are “embodied in software as a
13 dynamic linked library stored on a computer-readable storage medium.”

14 Kohashi fails to teach, suggest, or disclose these features. The Office
15 recognizes that Kohashi fails to teach the elements of claim 5 “embodied in
16 software on a computer readable storage medium,” as claim 9 requires, and hence
17 cites Yazolino.

18 Yazolino discloses, a cable television system having a multiplicity of
19 television program sources providing television signals in various predefined
20 television signal formats. Col. 2 describes the system of Yazolino as comprising a
21 television being controlled by an on/off switch, a tuner coupled to an input port, a
22 wireless signal sensor and a decoder for receiving and decoding a first defined set
23 of wireless command signals. The system has control programs, which allow it to
24 ignore signals not included in a predefined set. The system further has a controller
25

1 which sends channel selection commands corresponding to user entries, to the
2 tuner.

3 Yazolino further describes a system which uses a combination of hardware
4 and software to display a list of various TV programs available to a cable TV
5 viewer. It also provides notification if the viewer selects programs which are billed
6 on a "pay-per-view" basis. The system monitors to ensure that the TV is in fact
7 "on" and that the TV and the controller are on the same channel so that the viewer
8 does not get billed inadvertently for something the viewer is not in fact watching.
9 The system of Yazolino is basically a static system in that whatever signals are
10 received from the cable line are displayed for the viewer and the viewer makes a
11 selection. The system does not envision portability since it is a cable based,
12 permanent system. Therefore, there would be no benefit for having a dynamic
13 linked library to store information for various locales and which could be
14 upgraded based on changes in standards in those various locales.

15 The Office cites Yazolino control programs 212, wireless command
16 decoder program 150, and Table 1 as disclosing the elements of claim 9. Applicant
17 respectfully disagrees. Table 1 is labeled "Control Software Pseudocode for
18 Vertical Sync and SyncLock Monitoring." The purpose of Table 1, as described in
19 Columns 9-13, is to check for a condition where the Converter box 104 and the
20 television 120 are on different channels. The system of Yazolino uses control
21 software 210 to monitor whether the TV is on and whether the signal on the TV
22 matches the signal on the converter box. The mere fact that Yazolino uses
23 software in no way suggest to one skilled in the art to build a system of channel-
24 to-frequency mapping tables which are embodied in software as a dynamic link
25 library on a computer readable storage medium and indexed by a country table as

1 required by claim 9. The system of Yazolino is designed for use with cable
2 systems and as such the system is only designed to work with whatever signals
3 come through the cable. Further, by definition cable is not portable and so the
4 system would not teach or suggest any advantage of using a DLL which could be
5 replaced or upgraded as a user moves to different locals where broadcast standards
6 may have changed. As such Yazolino does not describe the system of claim 5, or
7 the system of claim 5 "embodied in software as a dynamic linked library stored on
8 a computer-readable storage medium" as required by claim 9.

9 The Office admits that the combination of Kohashi and Yazolino fails to
10 teach or suggest the elements (of claim 5) "embodied in software as a dynamic
11 linked library stored on a computer-readable storage medium" as required by
12 claim 9. And hence, the Office took Official Notice that DLL is well known in the
13 computer art under the Microsoft Windows environment. While applicant does not
14 disagree that DLL is well known in the computer art, the Office has not cited any
15 specific reference in the DLL art, nor any arguments, which teaches or suggests
16 the elements of claim 5 from which claim 9 depends. Moreover, Applicant is not
17 claiming a DLL, per se, but a specific television tuning component that is
18 embodied in a DLL. Accordingly, combining the references, even assuming
19 Official Notice of DLL's, provides no suggestion or teaching of the television
20 tuning component of claim 9. Therefore, it is respectfully requested that the §103
21 rejection of claim 9 be withdrawn.

22
23 **Claim 13** defines a television tuning system comprising:

24 tuner circuitry to tune to various television frequencies carrying
25 television video signals;

1 video decoder circuitry coupled to receive a television video signal
2 from the tuner circuitry and to convert the television video signal to
3 digital video data;

4 a tuner module coupled to adjust the tuner circuitry to a particular
5 television frequency;

6 a video decoder module to decode the digital video data according to
7 a particular video standard;

8 wherein the tuner module has a country table listing a plurality of
9 countries and multiple channel-to-frequency mapping tables that
10 provide video standards and correlate channel numbers to
11 corresponding frequencies for associated countries in the country
12 table, the channel-to-frequency mapping tables being indexed by the
13 country table so that selection of a country in the country table
14 references an associated channel-to-frequency mapping table for the
15 selected country; and

16 wherein the tuner module selects a channel-to-frequency mapping
17 table based upon input of a particular country and outputs a video
18 standard to the video decoder for use in decoding the digital video
19 data, the tuner module further selecting a television frequency from
20 the selected channel-to-frequency mapping table based upon input of
21 a corresponding channel and outputting the selected television
22 frequency to the tuner circuitry to cause the tuner circuitry to tune to
23 the selected television frequency.

24 Neither Kohashi, nor Yazolino, teaches or suggests "the tuner module has a
25 country table listing a plurality of countries and multiple channel-to-frequency
mapping tables that provide video standards and correlate channel numbers to
corresponding frequencies for associated countries in the country table," "the tuner
module has a country table listing a plurality of countries and multiple channel-to-
frequency mapping tables," or "the tuner module selects a channel-to-frequency
mapping table based upon input of a particular country"

Moreover, as described previously, Kohashi is a hardware based solution to
a television tuning system. This is illustrated by Kohashi Fig. 1, which shows all

1 identified components being circuits with the exception of a microprocessor to
2 control the circuits and memory for the microprocessor. Thus, Kohashi teaches a
3 fixed system, with hardware components and a microprocessor connected to the
4 circuitry. The memory allows the input of the variables, which include
5 frequencies, broadcasting station codes, broadcasting station names, etc. With this
6 type of structure, there is no need for software components so Kohashi would not
7 have contemplated the software based elements of the present invention, as
8 described above.

9 The Office generally argues that Kohashi discloses the television tuning
10 system recited in claim 13. Applicant disagrees. As described above, Kohashi
11 discloses a hardware video signal detection circuit that may set a TV channel, it
12 does not disclose, or teach the elements described above. This is evident from
13 Kohashi Fig. 1 which is cited by the Office as disclosing claim 13.

14 The Office cites elements 2,3,5-11, and 15 as disclosing the elements of
15 claim 13. Elements 2, 5, 6, and 15 are hardware circuits, element 3 is a
16 microprocessor, elements 7-11 are memory for the microprocessor.

17 No software modules that control underlying and associated hardware
18 components are disclosed in Kohashi. For example, claim 13 requires “a tuner
19 module coupled to adjust the tuner circuitry to a particular television frequency,
20 and a video decoder module to decode the digital video data according to a
21 particular video standard.” Kohashi lacks these elements.

22 Further, claim 13 requires, “the tuner module has a country table listing a
23 plurality of countries and multiple channel-to-frequency mapping tables that
24 provide video standards and correlate channel numbers to corresponding
25 frequencies for associated countries in the country table, the channel-to-frequency

1 mapping tables being indexed by the country table so that selection of a country in
2 the country table references an associated channel-to-frequency mapping table for
3 the selected country.” As discussed above, Kohashi does not teach or suggest these
4 elements.

5 Yazolino is equally silent as to the elements of claim 13. As described
6 above with respect to claim 9, Yazolino describes a cable-based system which is
7 connected to a TV and to a cable. The cable is supplying TV programs and the
8 system allows users to choose from the available programs. Since the system of
9 Yazolino is basically a permanent fixed system, it would not have envisioned the
10 various architectural layers recited in claim 13.

11 Claim 13 uses a modular concept where a module includes software to
12 control specific hardware components to achieve a given functionality. For
13 example, the tuner module implements the country code table and multiple
14 channel-to-frequency mapping tables. In the event changes are made to broadcast
15 television standards and channel frequencies within one or more countries, and as
16 new countries are created, or old countries cease to exist the software for the
17 module can be updated without affecting the remainder of the system. Yazolino
18 lacks such a capability and does not teach or suggest the benefits thereof.

19 Neither Kohashi nor Yazolino teach or suggest the elements of claim 13.
20 As such the combination fails to teach or suggest the elements of claim 13. For
21 these reasons, claim 13 is allowable over the cited prior art, and it is respectfully
22 requested that the §103 rejection be withdrawn.

23
24 **Claim 15** depends from claim 13 and hence incorporates all features of
25 claim 13. In addition to the elements of claim 13, claim 15 further describes the

1 tuner module to be a DLL. As discussed above, these features are not described,
2 taught, or suggested in the prior art. Therefore, applicant respectfully requests that
3 the §103 rejection of claim 15 be withdrawn.
4

5 **Claim 16** depends from claim 13 and hence incorporates all features of
6 claim 13. In addition to the elements of claim 13, claim 16 further describes “a
7 second tuner module different from the tuner module, the second tuner module
8 being used to replace the tuner module during upgrade without replacing the
9 tuning circuitry and the decoding circuitry.” These features are not described,
10 taught, or suggested by the cited art. Therefore, applicant respectfully requests that
11 the §103 rejection of claim 16 be withdrawn.
12
13

14 **Claim 18** depends from claim 13 and thereby incorporates all the
15 limitations of claim 13. Claim 18 further discloses “the tuner module stores a set
16 of television frequencies that map to corresponding channels within the particular
17 country for subsequent retrieval.”

18 As described above, Kohashi and Yazolino do not teach or suggest the
19 elements of claim 13. Further, they do not teach or suggest the further limitations
20 of claim 18. Therefore, applicant respectfully requests that the §103 rejection of
21 claim 18 be withdrawn.
22

23 **Claim 19** defines,
24
25

1 A television tuning manager for a television tuner, the television
2 tuning manager being implemented in software stored on a
3 computer-readable storage medium, the television tuning device
4 comprising:

5 a country table listing a plurality of countries;

6 multiple channel-to-frequency mapping tables correlating channel
7 numbers to corresponding frequencies for associated countries in the
8 country table, the channel-to-frequency mapping tables being
9 indexed by the country table so that selection of a country in the
10 country table references an associated channel-to-frequency
11 mapping table for the selected country;

12 a code segment to select a channel-to-frequency mapping table based
13 upon input of a particular country; and

14 a code segment to output a broadcast frequency from the selected
15 channel-to-frequency mapping table based upon input of a
16 corresponding channel.

17 Kohashi fails to teach or suggest the elements of claim 19 for two reasons:
18 first, Kohashi does not teach or suggest "channel-to-frequency mapping tables
19 being indexed by the country table so that selection of a country in the country
20 table references an associated channel-to-frequency mapping table for the selected
21 country," and second, Kohashi does not teach or suggest the use of the recited
22 code segment. Yazolino is equally silent to these features. Therefore, the
23 combination of Kohashi and Yazolino does not teach or suggest the invention of
24 claim 19. For these reasons, it is respectfully requested that the §103 rejection of
25 claim 19 be withdrawn.

1 **Claim 20** depends from claim 19 and incorporates all of the limitations
2 therein. Additionally, claim 20 recites additional features that taken together with
3 those of claim 19 define a television tuner manager not included in the cited
4 references. Specifically, claim 20 includes all of the elements of claim 19 and the
5 additional requirement that “the country table lists the countries according to a
6 uniquely assigned country code.”

7 Kohashi fails to teach or suggest the above elements. Yazolino is equally
8 silent. Therefore, the combination of Kohashi and Yazolino does not teach or
9 suggest the invention of claim 20. For these reasons, it is respectfully requested
10 that the §103 rejection of claim 20 be withdrawn

11
12 **Claim 22** depends from claim 19 and incorporates all of the limitations
13 therein. Additionally, claim 22 recites additional features that taken together with
14 those of claim 19 define a television tuner manager which is not taught or
15 suggested in the cited references. Therefore, it is respectfully requested that the
16 §103 rejection of claim 22 be withdrawn.

17
18 **Claim 23** depends from claim 19 and is allowable by virtue of this
19 dependency. Further, claim 23 requires “a code segment to store a set of broadcast
20 frequencies that map to corresponding channels.”

21 The combination of Kohashi and Yazolino fails to teach or suggest the
22 above elements. The Office cites Kohashi Fig. 2C and Fig. 11C as disclosing the
23 above elements. Applicant disagrees. As described previously Fig. 2c describes
24 the “corresponding relationship between countries or languages and preferential
25 orders of formats to be searched.” (Column 12). Fig. 11C describes the

1 “corresponding relationship between broadcasting codes and guide channels of
2 individual countries is stored together with preferential order numbers.” (Column
3 12). It is thus apparent that Kohashi, alone or in combination with Yazolino, does
4 not teach or suggest the invention of claim 23. For these reasons, it is respectfully
5 requested that the §103 rejection of claim 23 be withdrawn
6

7 **Claim 24** depends from claim 19. Further, claim 24 requires that the
8 elements of claim 19 be “embodied as a software dynamic linked library stored on
9 a computer-readable storage medium.” For the reasons stated above with respect
10 to claim 9, the cited combination, does not teach or suggest claim 24.
11

12 **Claim 39** depends from claim 32. As such, claim 39 contains all of the
13 limitations therein and is allowable by virtue of this dependency. For these
14 reasons, it is respectfully requested that the §103 rejection of claim 39 be
15 withdrawn.
16

17 **Claim 42** depends from claim 40 and is allowable by virtue of this
18 dependency. For these reasons, it is respectfully requested that the §103 rejection
19 of claim 42 be withdrawn.
20

21 **Claim 31**

22 **Claim 31** stands rejected under 35 USC §103(a) as being unpatentable over
23 Kohashi in view of Yazolino. The Examiner also takes Official Notice regarding
24 ITU and DLL. Applicant respectfully traverses the rejection.
25

1 **Claim 31** depends from claim 28. As such claim 31 contains all of the
2 limitations therein and is allowable by virtue of this dependency. Additionally,
3 claim 31 recites additional features, which taken together with those of claim 28,
4 define a computer-readable medium having computer-executable instructions for
5 performing the steps in the method as recited in claim 28. For these reasons, it is
6 respectfully requested that the §103 rejection of claim 31 be withdrawn

7
8 **Claims 14 and 21**

9 **Claims 14 and 21** stand rejected under 35 USC §103(a) as being
10 unpatentable over Kohashi in view of Yazolino. The Examiner also takes Official
11 Notice regarding ITU and DLL. Applicant respectfully traverses the rejection.

12 **Claims 14 and 21** depend from claim 13 and 19 respectively, and hence
13 incorporate the features of claim 13 and 19. Claim 14 and 21 further specify that
14 “the country table lists the countries according to an ITU code.”

15 For the reasons given above, the combination of Kohashi and Yazolino,
16 alone or with the Official Notice of the existence of the ITU, does not teach or
17 suggest the system of claims 13 and 19, nor listing the countries according to an
18 ITU code.

19
20 **Claims 17, 25, and 26**

21 **Claims 17, 25, and 26** stand rejected under 35 USC §103(a) as being
22 unpatentable over Kohashi in view of Yazolino. The Examiner also takes Official
23 Notice regarding ITU and DLL. Applicant respectfully traverses the rejection.
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1 **Claim 17** depends from claim 13, and therefore includes all of the
2 limitations thereof. As such, Claim 17 requires, “the tuner module has a country
3 table listing a plurality of countries and multiple channel-to-frequency mapping
4 tables that provide video standards and correlate channel numbers to
5 corresponding frequencies for associated countries in the country table, the
6 channel-to-frequency mapping tables being indexed by the country table so that
7 selection of a country in the country table references an associated channel-to-
8 frequency mapping table for the selected country.” Claim 17 further specifies “an
9 application program interface to expose functionality of the tuner module to an
10 application program.”

11 As described above, Kohashi and Yazolino do not describe, teach, or
12 suggest the elements of claim 13, from which claim 17 depends. Further, the
13 Office admits that the cited combination does not teach or suggest any API. The
14 Office takes Official Notice of APIs. However, Applicant is not claiming that
15 APIs in general are new; rather, Applicant is claiming a set of API’s that “expose
16 functionality of the tuner module to an application program.”

17 Therefore, the combination of Kohashi, Yazolino and Official Notice that
18 API’s exist, fails to teach or suggest the features of claim 17. Therefore, it is
19 respectfully requested that the §103 rejection of claim 17 be withdrawn.
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1 **Claim 25** depends from claim 19, and therefore includes all of the
2 limitations thereof. As such claim 25 requires, "multiple channel-to-frequency
3 mapping tables correlating channel numbers to corresponding frequencies for
4 associated countries in the country table, the channel-to-frequency mapping tables
5 being indexed by the country table so that selection of a country in the country
6 table references an associated channel-to-frequency mapping table for the selected
7 country." Claim 25 further specifies "a computer software module that is
8 dynamically accessible by an application program, the television tuning manager
9 further comprising an application program interface to expose functionality of the
10 television tuning manager to the application program."

11 As described above, Kohashi and Yazolino do not teach or suggest the
12 elements of claim 19, nor the API of claim 25. Therefore, it is respectfully
13 requested that the §103 rejection of claim 25 be withdrawn.

14
15 **Claim 26** defines "an application program interface for a television tuning
16 system, the application program interface being embodied on a computer-readable
17 medium and having methods for performing the following functions:

18 setting a current TV channel;
19 retrieving the current TV channel;
20 setting a country code;
21 retrieving the country code;
22 setting a storage index for regional channel to frequency mappings; and
23 retrieving the storage index.

24 Kohashi is a hardware based solution to a television tuning system. This is
25 illustrated by Kohashi Fig. 1 which describes hardware components and memory.

1 As such, Kohashi would not have contemplated a software tuning solution. Since
2 the inherent purpose of an API is to interface between software and other
3 components or programs, Kohashi, lacking software, wouldn't have contemplated
4 an API. Thus, Kohashi could not even begin to teach a specific API for the
5 television tuning system as claimed in claim 26.

6 The Office generally argues that Kohashi discloses methods for performing
7 the functions recited in claim 26. The office cites various places in Kohashi as
8 describing elements of claim 26. Applicant disagrees. While these references
9 cumulatively disclose a hardware circuit that may set a TV channel, they do not
10 disclose an API with various methods that may be called by a software application
11 to perform the various functions.

12 Yazolino, being a cable based system, does not teach or suggest "setting a
13 country code; retrieving the country code; or setting a storage index for regional
14 channel to frequency mappings." Additionally, as discussed above Yazolino does
15 not teach or suggest using an API.

16 In addition to failing to teach even APIs in general, the combination fails to
17 teach or suggest the specific functions of the API of claim 26. Taking Official
18 Notice that APIs generally, are old provides no assistance to the cited combination
19 with respect to the claimed API for a television tuning system.
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1 **Conclusion**

2 All pending claims 1-10 and 12-42 are in condition for allowance.
3 Applicant respectfully requests reconsideration and prompt issuance of the subject
4 application. If any issues remain that prevent issuance of this application, the
5 Examiner is urged to contact the undersigned attorney before issuing a subsequent
6 Action.

7 Respectfully Submitted,

8
9 Dated: 9/26/01

By: APM

Paul W. Mitchell
Reg. No. 44,453
(509) 324-9256 x37